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(54) **BEAM IRRADIATION SYSTEM AND CONTROL METHOD THEREOF**

(57) The invention provides a beam irradiation system and a control method thereof. The beam irradiation system includes: a first irradiation chamber and a second irradiation chamber; a beam generation device configured to generate a beam and emit the beam to the first irradiation chamber or the second irradiation chamber; a system control module including a first control sub-module and a second control sub-module, the first control sub-module corresponding to the first irradiation chamber and capable of controlling the beam generation device to emit the beam to the first irradiation chamber, and the second control sub-module corresponding to the

second irradiation chamber and capable of controlling the beam generation device to emit the beam to the second irradiation chamber; and a beam control module connected between the beam generation device and the system control module, and one of the first control sub-module and the second control sub-module being capable of controlling the beam generation device through the beam control module when the beam control module is not occupied by the other of the first control sub-module and the second control sub-module, such that the same beam irradiation system controls multiple irradiation chambers respectively.

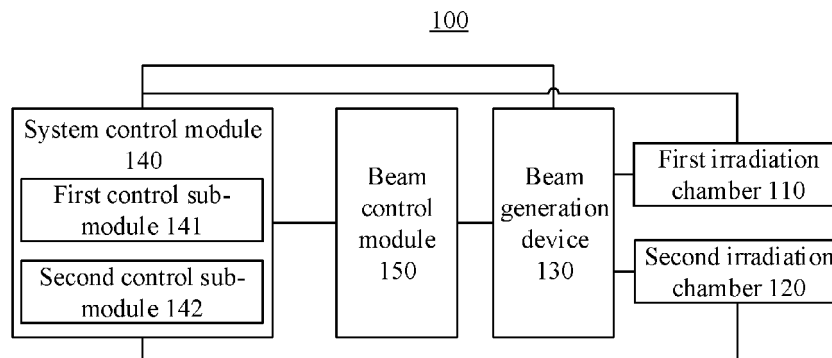


FIG. 1

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